

Quantitative Data Collection Guide for Student Affairs Professionals



UNDERSTANDING QUANTITATIVE DATA

Quantitative data refers to numerical data that can be measured and analyzed to identify patterns, trends, and outcomes. In student affairs, it plays an important role in understanding student engagement, evaluating program effectiveness, and informing decision-making. Our recommendation is to start simple with descriptive statistics (such as frequencies, averages, etc.) to uncover insights that can further enhance programming and student support.

How Quantitative Data Supports Decision Making in Student Affairs



Understanding the effectiveness of programming

E.g., comparing retention rates for students who participate in programs compared to students who don't



Assessing whether students are meeting the program's learning goals

E.g., using pre- and post-surveys to measure growth after participating in programming



Understanding disparities in access, participation, and student outcomes

E.g., disaggregating data by demographics (race/ethnicity, gender, first-generation status, class level, etc.) to understand who is participating in programming and what groups may need additional outreach/support



Understanding how support programs support institutional goals

E.g., first-year retention rates, graduation rates, and engagement indicators for students participating in student support programs compared to students who don't



Resource allocation

E.g., using utilization data to understand whether additional resources are needed to support programmatic growth

TYPES OF QUANTITATIVE DATA USED IN STUDENT AFFAIRS

Utilization Data

- Provides evidence of who, how, and when services and programs are being used
- Can demonstrate the demand and impact of the program
- Helps inform resource allocation
- Helps identify gaps in access
- Supports continuous improvement by tracking trends/growth over time
- Strengthens reporting

Departmental surveys

- Evaluate program effectiveness
- Understand student needs and priorities
- Supports funding proposals

Student records/Academic data

- Helps in identifying students who may need additional support and enables early interventions
- Informs targeted programming to support underrepresented groups

Institutional surveys

- Provides a place for students to share their experiences and concerns
- Helps identify institutional strengths and areas of improvement
- Can help guide the creation or revision of programs and services
- Can be used to demonstrate impact and accountability



ANALYTICAL APPROACHES

- Using **descriptive statistics** to look at trends over time by student cohort, demographic group, etc.
- Using **disaggregated data** to examine differences by race/ethnicity, first generation status, Pell status, etc.
- **Utilization data tracking** over time
- Using **survey data** and combining student records and departmental utilization data
- Using **statistical tests** to measure significance of intervention (see Appendix I: Statistical Tests and Purpose) – though this is not usually necessary to for decision-making

MIXED METHODS RESEARCH

A mixed-methods approach allows you to measure outcomes and understand the “why” behind those outcomes. You can use quantitative data to identify patterns and trends in topics such as sense of belonging, student health and well-being, among other topics, and use qualitative data to deepen those findings. Using a mixed-methods approach also helps with the storytelling piece of reporting to stakeholders and further humanizes the data.

What might that look like?

Programmatic assessment

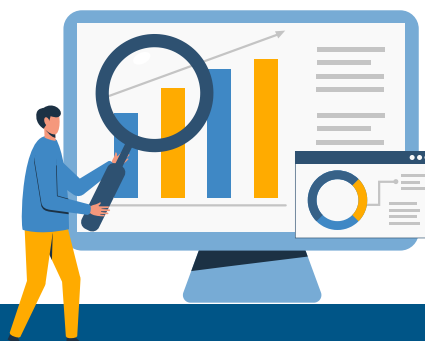
- Quantitative data piece: Pre- and post-surveys to measure skill development
- Qualitative data piece: Use focus groups/listening sessions to understand how students experienced the program

Needs Assessments

- Quantitative data piece: Survey students about access to food, housing, and mental health
- Qualitative data piece: Use focus groups or listening sessions to understand how these needs affect their academic and personal lives

STEP-BY-STEP GUIDE TO PLANNING A QUANTITATIVE ASSESSMENT PROJECT

1. Define your question: Start with a clear, focused question that aligns with your departmental outcomes
 - Use SMART outcomes (Specific, Measurable, Achievable, Relevant, and Time-Bound)
2. Identify what data is needed and where it will come from (e.g., surveys, event attendance, institutional data)
 - Tip: Check if the Student Affairs Information Research Office (SAIRO) has similar data that already exists
3. Decide how you will collect and analyze data
 - Keep it simple. Start with descriptive statistics (such as frequencies, averages, etc.) unless deeper analysis is needed
4. Implement the plan and gather data
 - During data collection, ensure data quality and protect student privacy
 - When analyzing data, look for trends and patterns, as well as any standout data points. You can use Excel for basic analysis and charts
5. Report and act on findings
 - Use charts and visuals to show patterns and highlight key takeaways
 - Communicate your results with campus stakeholders, including students, and use what you have learned to refine or strengthen programming



PARTNER WITH SAIRO

The Student Affairs Information and Research Office (SAIRO) is available as a thought partner to support your assessment efforts. We can assist with accessing student records, institutional survey data, such as the UC Undergraduate Experience Survey (UCUES) and the First Destination Survey (FDS) and provide guidance with survey analysis and interpretation.

APPENDIX 1: STATISTICAL TESTS AND PURPOSE

Statistical Tests:	Purpose:	Example:
T-Test	Compare means between groups	Compare pre- and post-test scores from a leadership workshop
ANOVA	Compare means between three or more groups	Compare satisfaction scores across student class levels
Chi-Square Test	Test relations between two categorical variables	Test relationship between demographic groups and participation in student organizations.
Correlation	Measure the strength and direction of a relationship between two variables	Correlation between participation in [program] and sense of belonging.



Do you have additional questions?

Contact the Student Affairs Information and Research Office at sairo@saonet.ucla.edu.